• NAIKE-Lithium Molecular Sieve

Description

It is a high performance lithium exchanged low silica form of the X-type zeolite with exceptional nitrogen capacity to provide optimal performance in the separation of oxygen fromair in medical oxygen concentrators. It is developed and designed for the production of up to 95% oxygen rich air streams in medical oxygen concentrators with air flows up to 10 liters per minute.There are three mechanisms of adsorption separation: steric hindrance effect, kinetic effect and equilibrium effect.

specification

The test items	unit	LiX				Note
		NKOX-100	NKOX-101	NKOX-102	NKOX-103	
Diametre	mm	1.6-2.5	0.4-0.8	0.8-1.2mm	1.3-1.7	~
Static Nitrogen adsorption	ml/g	≥24	≥23	≥24	≥24	1bar , 25°C
Nitrogen/Oxygen separation coefficient	~	≥6.2	≥6.2	≥6.2	≥6.2	1bar, 25°C
Crushing Strength	N	≥23	~	≥15	≥16	The average
Bulk density	kg/m3	620-640	620-650	620-640	620-640	
Particle Size	%wt	≥98	≥95	≥98	≥98	550°C ,1 Hour
coefficient of variation		≤0.35	≤0.35	≤0.35	≤0.35	
Residual Water	%wt	≤0.13	≤0.13	≤0.13	≤0.13	550°C,1 Hour

Application

Steel, nonferrous metallurgy, chemical industry, furnaces energy saving, environmental protection, paper making, aquaculture, health care.

Characteristics

Lithium based molecular sieve is a synthetic zeolite of lithium-type crystal structure, large Nitrogen adsorption capacity, high efficiency of oxygen/nitrogen separation.

In addition to ethanol, a well-designed and manufactured sieve is not only used to dehydrate the ethanol hydrated vapors, but is highly useful for dehydrating other types of chemicals too. Thus, gives a facility to use this system in future operations as well.

It shows high N2/O2 separation under a very low pressure, which lowers the consumption of producing oxygen.

The advantage of on the equilibrium adsorption capacity, It applies to various VPSA device for producing oxygen.